

# SUBJECT INDEX—Volume 18 (1993)

## Abstracts

on  $\alpha_2$ -adrenergic mechanisms in spinal anesthesia, July–August Supplement

from American Society of Regional Anesthesia Annual Meeting (1992), March–April Supplement

from I Pan American Symposium on Regional Anesthesia (1992), January–February Supplement

Acupuncture, for chronic pain, efficacy of, 66 (Bonica lecture)

Adductor thigh muscle spasm, interadductor approach to obturator nerve blockade for, 13

$\alpha_2$ -Adrenergic mechanisms in spinal anesthesia, abstracts on, July–August Supplement

Alcohol, plasma, after celiac plexus block, in gastric and pancreatic cancer, 366

American Board of Anesthesiology, 64 (letter)

American Society of Regional Anesthesia, perspective of on continuous spinal anesthesia, 387

American Society of Regional Anesthesia Annual Meeting (1992), abstracts from, March–April Supplement

Amputation, phantom limb pain after, 121

## Analgesia

masking pathology, 143 (editorial)

in terminal illness, 205 (editorial)

Anesthesia resident programs, 84

Anterior cruciate ligament repair, intraarticular morphine after, 254

Anticoagulation, removal of spinal/epidural catheter in, timing of, 264 (letter)

Arrhythmias, in long QT syndrome, in diabetic child, stellate ganglion block for, 60

Atraucan needle, for spinal anesthesia, 213

Atraumatic needle, dural puncture with, 213, 218

Auditory function, after spinal anesthesia, 162

Axillary brachial plexus block

perivascular techniques for, 335

Back pain, lumbar epidural steroids for, failure of, 238

Baclofen, in continuous spinal anesthesia, 419

Benign intracranial hypertension, postdural puncture headache in, epidural blood patch for, 315

Blood loss, during total hip arthroplasty, cardiac output and, 24

Blood patch, epidural

in benign intracranial hypertension, 315

facial nerve paralysis after, 196

## Book reviews

*Anesthesia for Ophthalmic and Otolaryngologic Surgery* (McGoldrick), 203

*Obstetric Anesthesia Pearls* (Ackerman & Juneja), 135

*Pain Management in AIDS Patients* (Janisse), 269

*Pain Management in Cardiothoracic Surgery* (Gravlee & Rauch), 329

## Brachial plexus block

axillary

perivascular techniques for, 335

continuous interscalene, with bupivacaine plus fentanyl, diaphragmatic motility and ventilatory function in, 93

interscalene, pulmonary function in, decreased injection volume and, 244

with spinal and epidural blocks, in microvascular surgery, 98

supraclavicular, bupivacaine for, local myotoxicity of, 304

## Bupivacaine

epidural

with fentanyl, not masking lithotomy position-related compartment syndrome, 189

thoracic, with sufentanil, high concentration/low volume vs. low concentration/high volume for, 39

with epinephrine, repeated intrapleural injections of, 374

with fentanyl, in continuous interscalene brachial plexus block, diaphragmatic motility and ventilatory function in, 93

local myotoxicity of, after continuous supraclavicular brachial plexus block, 304

low-dose, for continuous spinal anesthesia, for hip surgery in elderly, 170

spinal

continuous infusion of, dose requirements and block characteristics with, 52

level of injection of, 44

speed of injection and maximum sensory level with, 103

in stellate ganglion block, for dysrhythmias in child with diabetes and long QT syndrome, 60

toxicity of, endogenous digoxin-like factor enhancing, 369

Burns, inflammation after, local anesthetics for, 300

Cancer pain. *See also* Pain, chronic

celiac plexus block in, plasma alcohol concentrations after, 366

continuous spinal anesthesia for, 406

management of, 205 (editorial)

advances in, 66 (Bonica lecture)

Cardiac output, and intraoperative blood loss, during total hip arthroplasty, 24

## Catheter

epidural

direction of

and local anesthetic dose, 308

paresthesia and failure rate and, 331

spinal

continuous, FDA classification for, 424

placement of, 469

prolonged, postdural puncture headache and, 110

spinal/epidural, removal of, in anticoagulated patient, 264 (letter)

32-gauge subarachnoid, placement of, 200 (letter)

Cauda equina syndrome, in continuous spinal anesthesia, 473

Celiac plexus block, plasma alcohol concentrations after, in gastric and pancreatic cancer, 366

Cervical zygapophyseal joint pain, medial branch blocks for, 343

Cesarean delivery. *See also* under Obstetric

lidocaine/morphine analgesia after, fentanyl enhancement of, 201 (letter)

spinal anesthesia for, complications of, 128

Chronic pain. *See* Pain, chronic

Clonidine

in continuous spinal anesthesia, 419

epidural, postoperative epidural fentanyl requirements and, 176

transdermal, for reflex sympathetic dystrophy, 140 (letter)

Compartment syndrome, lithotomy position-related, not masked by epidural bupivacaine and fentanyl, 189

Continuous spinal anesthesia. *See* Spinal anesthesia, continuous

Corticosteroids, for lumbar epidural anesthesia, failure of, 238

Cough, persistent, after stellate ganglion block, 312

Dextran patch, epidural, for postdural puncture headache, 324, 325 (letters)

Diamorphine, subarachnoid, in total hip arthroplasty, analgesic requirements after, 114

Diaphragmatic motility, with continuous interscalene brachial plexus block, with bupivacaine plus fentanyl, 93

Dribble speed, for spinal anesthesia, 326

Droperidol, intravenous, for epidural morphine-induced pruritus, 118

Drug delivery device, implantable, in ewe, 230

Dural puncture

accidental, pneumocephalus after, 380 (letter), 193

headache after. *See* Postdural puncture headache

needle type for, 218

Dysrhythmias, in long QT syndrome, in diabetic child, stellate ganglion block for, 60

- Elderly, hip surgery in, low-dose bupivacaine for continuous spinal anesthesia in, 170
- Endogenous digoxin-like factor, enhancing bupivacaine toxicity, 369
- Epidermolysis bullosa, regional anesthesia in, 132
- Epidural analgesia  
  complications of, 34  
  lower limb motor function in, force meter for, 339  
  lumbar, steroids for, failure of, 238  
  not masking lithotomy position-related compartment syndrome, 189  
  post-thoracotomy, thoracic vs. lumbar morphine for, 351  
  thoracic, with bupivacaine plus sufentanil, high concentration/low volume vs. low concentration/high volume for, 39
- Epidural anesthesia  
  accidental dural puncture in, pneumocephalus and, 380 (letter), 193  
  clonidine for, postoperative epidural fentanyl requirements and, 176  
  complications of, 34  
  continuous, catheter direction in, paresthesia and failure rate and, 331  
  intraoperative blood loss during, cardiac output and, 24  
  lumbar, finger and toe pulse oximeter waveforms in, 106  
  morphine, pruritus and, intravenous droperidol for, 118  
  obstetric, after surgical correction of scoliosis, 191  
  with spinal and brachial plexus blocks, in microvascular surgery, 98
- Epidural blood patch  
  in benign intracranial hypertension, 315  
  facial nerve paralysis after, 196
- Epidural catheter  
  direction of, and local anesthetic dose, 308
- Epidural dextran patch, for postdural puncture headache, 324, 325 (letters)
- Epidural intravascular test dose, fentanyl for, in obstetrics, 296
- Epinephrine  
  with bupivacaine, repeated intrapleural injections of, 374  
  exogenous and endogenous plasma levels of, during dental treatment, 6
- Euthanasia, physician-assisted, 205 (editorial)
- Ewe, implantable drug delivery device in, 230
- Facial nerve paralysis, after epidural blood patch, 196
- Fentanyl  
  and bupivacaine, in continuous interscalene brachial plexus block, diaphragmatic motility and ventilatory function in, 93  
  after cesarean delivery, for lidocaine/morphine enhancement, 201 (letter)  
  epidural  
    with bupivacaine, not masking lithotomy position-related compartment syndrome, 189  
    postoperative requirement for, epidural clonidine and, 176  
  for epidural intravascular test dose in obstetrics, 296
- First International Symposium on alpha<sub>2</sub> Adrenergic Mechanisms of Spinal Anesthesia, 207
- Food and Drug Administration, medical device classifications of, 424
- Force meter, for assessment of lower limb motor function, after epidural analgesia, 339
- Franklin's disease, anesthesia in, 136 (letter)
- Gastric cancer, celiac plexus block in, plasma alcohol concentrations after, 366
- Headache, postdural puncture. *See* Postdural puncture headache
- Hearing, after spinal anesthesia, 162
- Herpes zoster, time of sympathetic block for, and prevention of post-herpetic neuralgia, 277
- Hip surgery  
  in elderly, low-dose bupivacaine for continuous spinal anesthesia in, 170  
  intraoperative blood loss in, cardiac output and, 24
- Horner's syndrome, after stellate ganglion block, 55
- Hypertension, benign intracranial, postdural puncture headache in, epidural blood patch for, 315
- Hypotension, induced, intraoperative blood loss and, cardiac output and, 24
- Implantable drug delivery device, in ewe, 230
- Inguinal paravascular block. *See* 3-in-1 block
- Insurance reimbursement, for chronic pain management, 327 (letter)
- Interadductor approach, to obturator nerve blockade, for adductor thigh muscle spasm, 13
- Interscalene block, for shoulder surgery, 30
- Interscalene brachial plexus block  
  with bupivacaine plus fentanyl, diaphragmatic motility and ventilatory function in, 93  
  pulmonary function in, decreased injection volume and, 244
- Intraarticular morphine, after anterior cruciate ligament repair, 254
- Intrapleural injection, repeated, with bupivacaine and epinephrine, 374
- Intravenous regional anesthesia, 1 (1992 ASRA Lecture)
- Knee surgery  
  intraarticular morphine after, 254
- Labat, Gaston, 64 (letter)
- Laryngeal nerve block, recurrent, after stellate ganglion block, 55
- Lemmon technique, modified, for spinal anesthesia and subarachnoid phenol denervation, 226
- Lidocaine  
  alone vs. with meperidine, for continuous spinal anesthesia, 290  
  after cesarean delivery, fentanyl enhancement of, 201 (letter)  
  continuous spinal, postdural puncture headache and, 47  
  intranasal, in sphenopalatine ganglion block, lack of effect of on submaximal effort tourniquet test pain, 356  
  tachyphylaxis to, neuronal cell culture studies of, 283
- Local anesthetics, for postburn inflammation, 300
- Local anesthetics  
  in continuous spinal anesthesia, neurotoxicity of, 434  
  of additives, 453  
  animal data for, 461  
  methodology for studies of, 439  
  physiologic mechanisms of, 448  
  dose of, epidural catheter direction and, 308
- Locked-in syndrome, transient, after vascular injection in stellate ganglion block, 378
- Long QT syndrome, in diabetic child, stellate ganglion block for, 60
- Loss of resistance to air technique, accidental dural puncture in, pneumocephalus after, 193
- Loss-of-resistance-to-negative-pressure test, for subarachnoid puncture, 155
- Low back pain, lumbar epidural steroids for, failure of, 238
- Lower extremity  
  lithotomy position-related compartment syndrome in, not masked by epidural bupivacaine and fentanyl, 189  
  post-epidural analgesia motor function in, force meter for, 339  
  sciatic nerve block in, with 3-in-1 block, 88
- Lumbar epidural analgesia, steroids for, failure of, 238
- Lumbar epidural anesthesia  
  finger and toe pulse oximeter waveforms in, 106  
  in parturient with surgically corrected scoliosis, 191
- Macintosh, Sir Robert, 145
- Mandibular nerve block, anatomic aspects of, 181
- Masked mischief, 143 (editorial)
- Medial branch blocks, for cervical zygapophyseal joint pain, 343
- Medical devices, regulatory aspects of, R&D perspective on, 424
- Medicare reimbursement, for chronic pain management, 327 (letter)
- Meperidine, lidocaine with and without, for continuous spinal anesthesia, 290
- Microvascular surgery, combined brachial plexus, spinal, and epidural blocks for, 98
- Modified Lemmon technique, for spinal anesthesia and subarachnoid phenol denervation, 226

- Morphine**  
after cesarean delivery, fentanyl enhancement of, 201 (letter)  
epidural, pruritus and, intravenous droperidol for, 118  
intraarticular, after anterior cruciate ligament repair, 254  
low-dose intravenous, lack of peripheral analgesic effect with, 250  
for post-thoracotomy analgesia, thoracic vs. lumbar administration of, 351  
subarachnoid, in total hip arthroplasty, subarachnoid diamorphine and, 114
- Myotoxicity**, of bupivacaine, in supraclavicular brachial plexus block, 304
- Nasal sinuscope**, sphenopalatine ganglion block visualization with, 139
- Needle**  
Atraucan, for spinal anesthesia, 213  
pencil point, dural puncture with, 218  
Quincke  
dural puncture with, 218  
postdural puncture headache and, 166, 218, 222  
Sprotte, postdural puncture headache and, 222  
Whitacre, postdural puncture headache and, 166
- Nerve blocks**, for ophthalmologic surgery, 380 (letter), 184
- Nerve injury**, in continuous spinal anesthesia  
anesthetic-related. *See* Neurotoxicity, of local anesthetics  
mechanical, 481
- Nerve stimulator**  
for sub-sartorial nerve block, 266 (letter)  
for testing regional block, 139 (letter)  
unassisted use of, 199 (letters)
- Neuraxial opiate administration**, for chronic pain, 66 (Bonica lecture)
- Neurotoxicity**, of continuous spinal anesthesia, 434  
of additives in, 453  
animal data for, 453  
methodology for studies of, 439  
physiology of, 448
- Obstetric analgesia**  
after cesarean delivery, fentanyl enhancement of lidocaine/morphine in, 201 (letter)  
spinal, after inadequate epidural block, in patient with prior surgical correction of scoliosis, 191
- Obstetric anesthesia**  
continuous spinal, continuous, 402. *See also* Spinal anesthesia  
epidural, catheter direction in, paresthesias and failure rate and, 331  
epidural intravascular test dose in, fentanyl for, 296  
spinal  
for cesarean delivery, complications in, 128  
supraventricular tachycardia in, 261
- Ophthalmologic surgery**  
nerve blocks for, 380 (letter), 184  
peribulbar block for, 380 (letter), 184
- Pain**  
acute, regional anesthesia for, respiratory function during, 361  
cancer  
celiac plexus block in, plasma alcohol concentrations after, 366  
continuous spinal anesthesia for, 406  
management of, 205 (editorial)  
advances in, 66 (Bonica lecture)  
chronic  
continuous spinal anesthesia for, 406  
management of  
advances in, 66 (Bonica lecture)  
reimbursement for, 327 (letter)  
low back, lumbar epidural steroids for, failure of, 238  
phantom limb, 121  
postoperative. *See* Postoperative pain  
sympathetically maintained, terazosin for, 318
- Pain management**  
masked pathology in, 143 (editorial)  
in terminal illness, 205 (editorial)
- Pan American Symposium on Regional Anesthesia (1992)**, abstracts from, January–February Supplement
- Pancreatic cancer**, celiac plexus block in, plasma alcohol concentrations after, 366
- Paralysis**  
in continuous spinal anesthesia, 473, 481  
facial nerve, after epidural blood patch, 196
- Paresthesia**, epidural catheter direction and, 331
- Pencil point needle**, dural puncture with, 218
- Peribulbar block**, for ophthalmologic surgery, 380 (letter), 184
- Peripheral nerve blocks**  
nerve stimulator for, 199 (letter)  
unassisted, 137 (letter)
- Phantom limb pain**, 121
- Plasma alcohol concentrations**, after celiac plexus block, in gastric and pancreatic cancer, 366
- Pneumocephalus**  
after accidental dural puncture, 380 (letter), 193
- Postburn inflammation**, local anesthetics for, 300
- Postdural puncture headache**  
in continuous spinal anesthesia, 47  
epidural blood patch for  
in benign intracranial hypertension, 315  
facial nerve paralysis after, 196  
epidural dextran patch for, 324, 325 (letters)  
pencil point vs. Quincke-type needle and, 218  
prolonged spinal catheter placement and, 110  
Sprotte vs. Quincke needle and, 222  
25-gauge Whitacre vs. Quincke needle and, 166
- Post-herpetic neuralgia**  
prevention of, and time of sympathetic block for herpes zoster, 277  
sympathetic nervous system in, 271 (editorial)
- Postoperative pain**  
anesthesiologist-managed, 82  
after anterior cruciate ligament repair, intraarticular morphine for, 258  
rectus block for, 258  
after total hip arthroplasty, subarachnoid diamorphine for, analgesic requirements after, 114
- Pruritus**, epidural morphine-induced, intravenous droperidol for, 118
- Pulmonary function**, in interscalene brachial plexus block, decreased injection volume and, 244
- Pulse oximeter waveforms**, from finger and toe, in lumbar epidural anesthesia, 106
- Quincke needle**, postdural puncture headache and, 166, 218, 222
- Rectus block**, for postoperative pain, 258
- Reflex sympathetic dystrophy**, transdermal clonidine for, 140 (letter)
- Regional anesthesia**  
during acute pain, respiratory function during, 361  
continuing evolution of, 65 (editorial)  
intravenous, 1 (1992 ASRA Lecture)  
resident programs in, 84
- Resident programs**, anesthesia, 84
- Respiratory function**  
with continuous interscalene brachial plexus block, with bupivacaine plus fentanyl, 93  
with regional anesthesia, during acute pain, 361
- Rigid nasal sinuscope**, sphenopalatine ganglion block visualization with, 139
- Saphenous nerve block**, sub-sartorial, nerve stimulator for, 266 (letter)
- Sciatic nerve block**  
anatomic landmark for, 322 (letter)  
anterior approach for, 265 (letter)  
reevaluation of, 18  
in supine position, 265 (letter)  
with 3-in-1 block, for lower limb surgery, 88

- Scoliosis, surgically corrected, spinal anesthesia after, in parturient, 191
- Shoulder surgery, interscalene block for, 30
- Sinuscope, rigid nasal, sphenopalatine ganglion block visualization with, 139
- Somatostatin, in continuous spinal anesthesia, 419
- Sphenopalatine ganglion block  
history of, 274  
with intranasal lidocaine, lack of effect of on submaximal effort  
tourniquet test pain, 356  
under vision using rigid nasal sinuscope, 139 (letter)
- Spinal anesthesia  
 $\alpha_2$  adrenergic mechanisms of, symposium on, 207  
Atraucan needle for, 213  
auditory function after, 162  
bupivacaine for, speed of injection and maximum sensory level and, 103  
continuous  
ASRA perspective on, 387  
with baclofen, clonidine, and somatostatin, 414  
Canadian perspective on, 414  
for cancer and chronic pain, 406  
catheter for  
FDA classification for, 424  
placement of, 469  
cauda equina syndrome and, 473  
complications of, statistical analysis of, 428  
dose requirements and block characteristics with, 52  
historical perspective on, 390  
lidocaine with and without meperidine for, 290  
local anesthetic toxicity from, 434  
from additives, 453  
animal data for, 461  
methodology for studies of, 439  
physiology of, 448  
with low-dose bupivacaine, for hip surgery in elderly, 170  
nerve injury and paralysis in, 473, 481  
obstetric, 402  
operative indications and clinical experience with, 394  
postdural puncture headache after, 47  
uncommon applications for, 414  
dribble speed for, 326  
with epidural and brachial plexus blocks, in microvascular surgery, 98  
level of injection in, 44  
long-term, for chronic pain, 66 (Bonica lecture)  
modified Lemmon technique for, 226  
obstetric  
for cesarean delivery, complications in, 128  
after inadequate epidural block, in patient with prior surgical correction of scoliosis, 191  
supraventricular tachycardia in, 261
- Spinal catheter  
prolonged placement of, postdural puncture headache and, 110  
removal of, in anticoagulated patient, 264 (letter)
- Sprotte needle, postdural puncture headache and, 222
- Stellate ganglion block  
contralateral spread of local anesthetic in, 55  
for dysrhythmias, in child with diabetes and long QT syndrome, 60  
persistent cough after, 312  
vascular injection in, transient locked-in syndrome after, 378
- Steroids, for lumbar epidural anesthesia, failure of, 238
- Subarachnoid catheter, 32-gauge, placement of, 200 (letter)
- Subarachnoid diamorphine, in total hip arthroplasty, analgesic requirements after, 114
- Subarachnoid phenol denervation, modified Lemmon technique for, 226
- Subarachnoid puncture, loss-of-resistance-to-negative-pressure test for, 155
- Sub-sartorial saphenous nerve block, nerve stimulator for, 266 (letter)
- Suicide, physician-assisted, 205 (editorial)
- Superior hypogastric plexus block, with single needle and CT guidance, 63 (letter)
- Supraclavicular brachial plexus block, bupivacaine for, local myotoxicity of, 304
- Supraventricular tachycardia, in obstetric spinal anesthesia, 261
- Surgery. *See also* specific sites and procedures for  
blood loss during, cardiac output and, 24
- Sympathetically maintained pain, terazosin for, 318
- Sympathetic block, for herpes zoster, time of, and prevention of post-herpetic neuralgia, 277
- Sympathetic nervous system, in post-herpetic neuralgia, 271 (editorial)
- Tachycardia, supraventricular, in obstetric spinal anesthesia, 261
- Tachyphylaxis, to lidocaine, neuronal cell culture studies of, 283
- Terazosin, for sympathetically maintained pain, 318
- Terminal illness, pain management in, 205 (editorial)
- Tetracaine, continuous spinal, postdural puncture headache and, 47
- Third party payment, for chronic pain management, 327 (letter)
- Thoracic surgery, epidural bupivacaine plus sufentanil for, in high concentration/low volume vs. low concentration/high volume, 39
- Thoracotomy, postoperative analgesia for, thoracic vs. lumbar morphine for, 351
- 3-in-1 block(s), 64 (letter)  
and sciatic nerve block, for lower limb surgery, 88
- Total hip arthroplasty  
intraoperative blood loss in, cardiac output and, 24  
subarachnoid diamorphine for, analgesic requirements after, 114
- Transcutaneous electrical nerve stimulation, for chronic pain, 66 (Bonica lecture)
- Transdermal clonidine, for reflex sympathetic dystrophy, 140 (letter)
- Ventilatory function  
with continuous interscalene brachial plexus block, with bupivacaine plus fentanyl, 93  
with regional anesthesia, during acute pain, 361
- Whitacre needle, postdural puncture headache and, 166

# AUTHOR INDEX—Volume 18 (1993)

- Abram, Stephen E., 66, 238, 406  
Aguilar, J. L., 193  
Ahmad, Afzal, 184  
Ahmad, Shreen, 184  
Aldrete, J. Antonio, 325  
Alexander, Leroy A., 378  
Allende, Mario, 331  
Arkoosh, Valerie A., 402  
Atanassoff, Peter G., 88  
Aubas, Pierre, 170
- Barnard, M., 52  
Barnsley, Les, 343  
Baxter, Alan D., 414  
Becker, N., 44  
Beerle, Brion J., 189  
Bengtsson, M., 250  
Benzon, Honorio T., 184  
Berde, Charles B., 283  
Bertelsen, F., 44  
Bevacqua, Brian K., 394  
Biboulet, Philippe, 170  
Björnsson, A., 250  
Boe, Jacob, 374  
Bogduk, Nikolai, 343  
Bonada, Gérard, 290  
Bonnet, F., 110, 176  
Boulton, Thomas B., 145  
Bourke, Denis L., 326, 361  
Boyd, Arthur, 351  
Brems, John, 30  
Brennum, J., 300  
Bridenbaugh, L. Donald, 84  
Bromage, Philip R., 143, 155, 481  
Brownridge, Peter, 339  
Bux, Martin J. L., 103  
Buettner, Johannes, 166  
Bugedo, Guillermo J., 331
- Callesen, T., 44  
Capogna, Giorgio, 218  
Carli, F., 52  
Catalano, Piera, 218  
Celleno, Danilo, 218  
Chang, P. C., 18  
Chauvet, Philippe, 170  
Cherres, Oscar G., 331  
Chickalingaiah, Ravi, 283  
Christiansen, C., 44  
Clark, William R., 132  
Clough, David G. F., 213  
Colburn, Raymond W., 230  
Coombs, Dennis W., 230  
Corke, Barry C., 155  
Costantino, Paolo, 218
- Dagnino, Jorge A., 331  
Dahl, J. B., 300  
Dang, R., 181  
Dan, Kenjiro, 34  
D'Athis, Françoise, 170  
Daubländer, M., 6  
Dechaubry, V., 176  
DeKock, M., 369
- Delaunay, L., 176  
DeLeo, Joyce A., 230  
Deschodt, Jacques, 170  
Devic, A., 222  
Dick, W., 6  
Dittmann, Martin, 213  
Djiane, Veronique, 290  
Drasner, Kenneth, 434  
Dukes, Robert R., 378
- Eisenach, James C., 207, 213  
Elmas, Cemal, 88  
Engdahl, Olle, 374  
Emy, Philippe, 290
- Fagraeus, Lennart, 155  
Fibuch, E. E., 419  
Fogarty, D. J., 114  
Fuder, H., 6  
Fukuda, Taeko, 366  
Funjinaga, Masahiko, 47
- Gajraj, Noor M., 261  
Garrido, F. Javier, 196  
Gautier, P., 369  
Gloeggler, Paul J., 244  
Go, George, 24  
Gombar, K. K., 181  
Gombar, S., 181  
González-Carrasco, F. J., 193  
Grant, Gilbert J., 351  
Griggs, Chauncey T., 283  
Gupta, A., 250
- Harada, Toshiaki, 34  
Harbers, J. B. M., 39  
Harrison, Charles, 326  
Hartwell, Patricia W., 277  
Hasenbos, M. A. W. M., 39  
Heine, Hannele, 128  
Henin, D., 369  
Hickey, Rosemary, 335  
Hoffman, Joan, 335  
Hogan, Quinn H., 271  
Holst, D., 469  
Hopwood, Margaret B., 238, 428  
Horta, Bernardo L., 118  
Horta, Marcio L., 118  
Hurley, Ronald J., 390  
Hurson, B. J., 254
- Illesley, Anthony H., 339  
Inberg, Per, 98
- Jaradeh, Safwan, 473  
Jennings, Garry S., 191  
Jones, Michael E., 339  
Joos, Stephane S., 213  
Joshi, G. P., 254
- Kalichman, Michael W., 448  
Kaplan, Richard F., 60  
Kehlet, H., 300  
Kermarec, N., 110
- Kettler, R., 222  
Kitahata, Luke M., 356  
Klose, Roderich, 166  
Kopacz, Dan J., 84  
Kotelko, Dennis M., 296  
Kreitzer, Joel, 380  
Kroon, Jan Willem, 103
- Lang, S. A., 18  
Laveaux, M. M. D., 39  
Lawin, P., 469  
Leavitt, Kathleen A., 135  
Lema, Mark J., 121, 205, 329  
Leppert, C., 176  
Levron, J. C., 176  
Liem, T., 39  
Lipp, M., 6  
Liu, N., 110, 176  
Llubia, C., 193  
Loeffler, Christopher, 315  
Lübbesmeier, H., 469  
Lundberg, Johan, 162  
Lussos, Steven A., 315
- Macadaeg, Kevin, 308  
Magnusson, Mans, 162  
Maitra-D'Cruz, A., 222  
Mansell, William H., 380  
Mansour, N. Y., 322  
Marx, Gertie F., 191  
Maurette, Pierre, 290  
Mazze, Richard L., 47  
McCarroll, S. M., 254  
McSwiney, M., 254  
Mesa, Alonso, 60  
Milholland, Arthur V., 55  
Miller, Megan, 296  
Milligan, K. R., 114  
Mineo, Robert, 24, 106  
Moiniche, S., 300  
Möllmann, M., 469  
Montefiore, A., 110  
Montes, José M., 331  
Morales, A., 312  
Morrison, Lachlan M. M., 213  
Muñoz, Hernán, 331  
Myers, Robert R., 439
- Naveira, F. A., 312  
Neuvonen, Pertti Jaakko, 98  
Nogués, S., 193
- O'Connor, Theresa Z., 356  
Okubo, Naomitsu, 366  
Olmos, Miguel, 196  
O'Rourke, P., 254  
Ostheimer, Gerard W., 65
- Pace, Nicholas A., 261  
Pascoe, Handel F., 191  
Patel, S., 222  
Patrick, Jane, 424  
Peeters-Asdourian, Christine, 324  
Pere, Pertti, 93, 304



- Perez, Maria, 196  
 Petros, A. J., 52  
 Pitkanen, Mikko, 304  
 Plummer, John L., 339  
 Price, Howard M., 318
- Ramamurthy, Somayaji, 335  
 Ramanathan, Sivam, 351  
 Rasmus, Kathleen T., 296  
 Rauss, A., 110  
 Ready, L. Brian, 82  
 Reed, Allan P., 380  
 Robins, Valerie F., 318  
 Rogers, James N., 335  
 Ronzoni, G., 52  
 Rosenberg, Per H., 1, 304  
 Rosen, Peter J., 296  
 Rose, Robert J., 189  
 Rottman, Richard L., 296  
 Rowlingson, John C., 453
- Sandstedt, Stefan, 374  
 Sato, Sigeito, 366  
 Scott, D. Bruce, 213  
 Selander, Dag, 461  
 Sharrock, Nigel E., 24, 106  
 Silverman, David G., 356  
 Singh, B., 181  
 Sjöberg, F., 250
- Smith, D., 52  
 Sommer, Claudia, 439  
 Soosko, Valery S., 226  
 Sopchak, Andrew M., 132  
 Spencer, Robert F., 356  
 Sprung, J., 222  
 Sprung, Juraj, 326  
 Srivastava, S. K., 181  
 Stanton-Hicks, M., 6  
 Stevens, Donald S., 318, 324  
 Stienstra, Rudolf, 103  
 Stone, Joseph J., 296  
 Strichartz, Gary, 283
- Tajima, Keiichi, 366  
 Takahashi, Hiroshi, 366  
 Tanaka, Keiichi, 34  
 Tarkkila, Pekka Juhani, 98, 128  
 Templeton, Thomas, 258  
 Tetzlaff, John E., 30  
 Thage, B., 44  
 Thomas, Padmini, 326  
 Thomas, P. Sebastian, 132, 308  
 Thompson, Gale E., 387  
 Tingle, Linda J., 335  
 Tiso, Robert L., 308  
 Törnebrandt, Kenneth, 162  
 Turndorf, Herman, 351  
 Twitchell, Bonnie B., 230
- Urmey, William F., 244
- Vacher, Elisabeth, 170  
 Van Steenberghe, Albert, 155, 213  
 Van Zundert, Andre, 155, 213  
 Verenkin, Nickolai L., 226  
 Vidal-López, F., 193  
 Vilkki, Simo, 98
- Wahlström, Torsten, 304  
 Waldman, Steven D., 274, 327  
 Wallace, Donald M., 261  
 Wallace, Mark S., 55  
 Wang, Lars Peter, 162  
 Wassef, M. R., 13  
 Watanabe, Hiroaki, 304  
 Watanabe, Ryuiku, 34  
 Wesolowski, Judy A., 121  
 Wilder, Robert T., 283  
 Winnie, Alon P., 277  
 Wresch, Klaus-P., 166  
 Wright, William C., 296
- Yip, R. W., 18  
 Yoon, Helen J., 30  
 Yoshii, Wade Y., 296
- Zakowski, Mark, 351

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION (Act of August 12, 1970: Section 3685, Title 39 United States Code) Date of Filing—October 1, 1993, Title of Publication—Regional Anesthesia; Frequency of Issue—Bimonthly; Annual Subscription Price—\$120.00; Location of Known Office of Publication—12107 Insurance Way, Hagerstown, MD 21740; Location of the Headquarters or General Business Offices of the Publisher—J.B. Lippincott Company, 227 East Washington Square, Philadelphia, PA 19106; Publisher—American Society of Regional Anesthesia, 1910 Byrd Avenue, P.O. Box 11086, Suite 100, Richmond, VA 23230-1086; Editor—Gerard W. Ostheimer, M.D., Department of Anesthesia, Brigham and Women's Hospital, 75 Francis St., Boston, MA 02115; Managing Editor—Todd Hummel, 227 East Washington Square, Philadelphia, PA 19106; Owner—American Society of Regional Anesthesia, 1910 Byrd Ave., Suite 118, P.O. Box 11086, Richmond, VA 23230-1086. Known Bondholders, Mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities—none. A. Total no. copies printed (*net press run*), average 8,871, actual 9,600; B. Paid circulation 1. Sales through dealers and carriers, street vendors and counter sales, average none, actual none; 2. Mail subscriptions, average 8,244, actual 8,859; C. Total paid circulation, average 8,244, actual 8,859; D. Free distribution by mail, carrier or other means. Samples complimentary, and other free copies, average 165, actual 122; E. Total distribution (*sum of C and D*), average 8,409, actual 8,981; F. Copies not distributed 1. Office use, leftover, unaccounted, spoiled after printing, average 462, actual 619. Returns from news agents, none; G. Total (*sum of E & F—should equal net press runs shown in A*), average 8,871, actual 9,600. I certify that the statements made by me above are correct and complete. Virginia Martin, *Vice President*.

